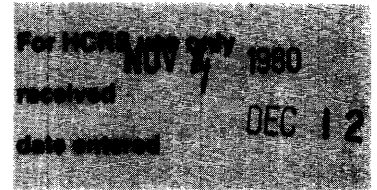


**United States Department of the Interior
Heritage Conservation and Recreation Service**

**National Register of Historic Places
Inventory—Nomination Form**

See instructions in *How to Complete National Register Forms*

Type all entries—complete applicable sections



1. Name

historic Administration Building, Brewster Hangar,
Newark Metropolitan Airport: Medical Building

and/or common Newark International Airport

2. Location

street & number Jct. of Rt. 22/1/9 and Port Road _____ not for publication

city, town Newark _____ vicinity of congressional district 10th

state New Jersey code 034 county Essex code 013

3. Classification

Category	Ownership	Status	Present Use
☐ district	☒ public	☒ occupied	☐ agriculture ☐ museum
☒ building(s)	☐ private	☐ unoccupied	☐ commercial ☐ park
☐ structure	☐ both	☐ work in progress	☐ educational ☐ private residence
☐ site	Public Acquisition	Accessible	☐ entertainment ☐ religious
☐ object	☐ in process	☒ yes: restricted	☐ government ☐ scientific
	☐ being considered	☐ yes: unrestricted	☐ industrial ☒ transportation
		☐ no	☐ military ☐ other:

4. Owner of Property

name City of Newark

street & number 920 Broad Street

city, town Newark _____ vicinity of state New Jersey

5. Location of Legal Description

courthouse, registry of deeds, etc. Essex County Hall of Records

street & number High Street

city, town Newark _____ state New Jersey

6. Representation in Existing Surveys

title N.J. Historic Sites Inventory has this property been determined eligible? ☐ yes ☐ no

date 1979 _____ federal ☒ state _____ county _____ local

depository for survey records Office of Historic Preservation

city, town Trenton _____ state New Jersey

7. Description

Condition

☒ excellent
☐ good
☐ fair

☐ deteriorated
☐ ruins
☐ unexposed

Check one

☐ unaltered
☒ altered

Check one

☒ original site
☐ moved date _____

Describe the present and original (if known) physical appearance

Newark, New Jersey lies on the Passaic River and on Newark Bay, close to a dense low-lying industrial area eight miles west of New York City. The airport is two miles by road from Newark's City Hall, and nine miles by road from 42nd Street and Broadway in New York City.

The airport is situated on the Newark meadows, a large tract of marshland which lies thirteen feet above sea level. West and south of the airport stretch the meadows; to the north is U.S. Route 1, an express highway leading to Newark and New York by way of two vehicular tunnels beneath the Hudson River; to the east are the tracks of the Central Railroad of New Jersey and the New Jersey Turnpike, a mile beyond which lies Newark Bay.

The trio of pre-World War II buildings, which consists of the ADMINISTRATION BUILDING, BREWSTER HANGAR, and the MEDICAL BUILDING was built between 1934 and 1938. Together they represent the early years of the Newark Metropolitan Airport. On the map, the buildings are nearly adjacent to one another, with the 1952 Terminal separating the Brewster Hangar from the Administration Building. Despite the fact that this trio of structures possesses integrity of location, their present uses differ from their original ones. In addition, access to the structures by road and by runway has been altered to the extent that the perception of the buildings in relation to their setting bears no resemblance to that perceived from the original configuration. For these reasons, the boundaries of the nominated property have been defined as the exterior perimeter of each structure.

The airway station known as the ADMINISTRATION BUILDING was completed in 1935. It is a long, relatively narrow structure of concrete construction faced with horizontal bands of poured concrete alternating with bands of windows articulated with brick inserts. The main entrance facade consists of a two-story three-bay central entrance block which is 250-by-60 feet in plan, with two 90-by-38 foot wings bent back from the air-field elevation as if in flight. The center portion of the entrance block projects out slightly from its end bays which are each detailed with a two-story vertical window opening with a recessed square panel above. The entrance doors are reached by ascending six steps which lead to the three-part entrance - a center revolving door with double doors to either side. Each set of doors was originally topped with a 12-pane window with decorative aluminum grillwork decorating each pane. This complete entrance ensemble is recessed. Above this entrance is a round clock flanked by stylized wings.

The air-field elevation was designed with a number of marquees which projected out from the building and under which airplanes were brought and loaded. The centerpiece of this elevation is the air traffic control tower, designed as a semi-circular form which was repeated in the design of the entrance canopy and tiered entrance steps below.

8. Significance

Period	Areas of Significance—Check and justify below			
☐ prehistoric	☐ archeology-prehistoric	☐ community planning	☐ landscape architecture	☐ religion
☐ 1400-1499	☐ archeology-historic	☐ conservation	☐ law	☐ science
☐ 1500-1599	☒ agriculture	☐ economics	☐ literature	☐ sculpture
☐ 1600-1699	☒ architecture	☐ education	☐ military	☐ social/
☐ 1700-1799	☐ art	☒ engineering	☐ music	☐ humanitarian
☐ 1800-1899	☐ commerce	☐ exploration/settlement	☐ philosophy	☐ theater
☒ 1900-	☒ communications	☐ industry	☐ politics/government	☒ transportation
		☐ invention		☐ other (specify)

Specific dates 1928 to present **Builder/Architect**

Statement of Significance (in one paragraph)

Newark Metropolitan Airport was the first great commercial airport in operation in the United States. Development began in 1928. During the early years of the airport's existence, one-third of the world's air traffic passed down its runways. The trio of Art Deco style structures which includes the ADMINISTRATION BUILDING, BREWSTER HANGAR, and the MEDICAL BUILDING, is the last remaining testament to the early days of the airport's development. Built prior to World War II, they possess national significance in their relation to the historical development of air transportation. In addition, there is significance in the airport's use during World War II, the development of major engineering and communication technology, and the fact that the WPA Project was used to construct the ADMINISTRATION BUILDING.

While not the earliest buildings constructed for the airport's use, this group of structures, built during the 1930's, replaced the outmoded buildings which multiplied during the first five-to-six years of the airport's rapid development. All three structures have survived in good structural condition and with a high degree of architectural integrity. Newark Metropolitan Airport, which officially opened on October 1, 1928, was designated a National Historic Civil Engineering Landmark in 1978 by the American Society of Civil Engineers.

The significance of the ADMINISTRATION BUILDING, BREWSTER HANGAR, and the MEDICAL BUILDING cannot be discussed without addressing the significance of the early development of the airport as a whole.

In 1907, the New Jersey Legislature enacted a law which enabled the City of Newark to purchase swampy lowlands east of the city for the dual purpose of reclamation and development. Lindbergh's dramatic solo flight across the Atlantic Ocean, from New York to Paris, in May, 1927 fastened public attention upon the practical future of aviation. On July 11, 1927, Mayor Thomas L. Raymond of Newark gave his support to the construction of a municipal airport. City Engineer James W. Costello was asked to prepare plans for a \$6,000,000 project. The idea was endorsed by the U.S. Assistant Secretary of Commerce for Aeronautics, William P. MacCracken. Several months later a special commission appointed by then Secretary of Commerce Herbert C. Hoover announced that the proposed site of Newark Airport, adjacent to Newark Bay and U.S. Route 1, provided an excellent location in the metropolitan area for a central air terminal since many railway connections were available and weather conditions were considered favorable. In February, 1928, construction of an aviation field of 420 acres of meadowland was begun.

9. Major Bibliographical References

See Continuation Sheet

ACREAGE NOT VERIFIED
UTM NOT VERIFIED

10. Geographical Data

Acreage of nominated property 5*

Quadrangle name Elizabeth, NJ/NY

Quadrangle scale 1:24,000

UMT References

A

1	8
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5	7	0	2	1	0
---	---	---	---	---	---

4	5	0	6	3	8	0
---	---	---	---	---	---	---

Zone Easting Northing

B

1	8
---	---

5	7	0	2	1	0
---	---	---	---	---	---

4	5	0	6	3	4	0
---	---	---	---	---	---	---

Zone Easting Northing

C

1	8
---	---

5	7	0	5	4	0
---	---	---	---	---	---

4	5	0	6	3	4	0
---	---	---	---	---	---	---

D

1	8
---	---

5	7	0	5	3	0
---	---	---	---	---	---

4	5	0	6	3	8	0
---	---	---	---	---	---	---

E

1	8
---	---

5	7	0	9	0	0
---	---	---	---	---	---

4	5	0	6	3	2	0
---	---	---	---	---	---	---

F

1	8
---	---

5	7	0	9	4	0
---	---	---	---	---	---

4	5	0	6	2	8	0
---	---	---	---	---	---	---

G

1	8
---	---

5	7	1	0	0	0
---	---	---	---	---	---

4	5	0	6	2	9	0
---	---	---	---	---	---	---

H

1	8
---	---

5	7	1	4	0	0
---	---	---	---	---	---

4	5	0	6	1	7	0
---	---	---	---	---	---	---

Verbal boundary description and justification

See Continuation Sheet

List all states and counties for properties overlapping state or county boundaries

state	code	county	code
-------	------	--------	------

state	code	county	code
-------	------	--------	------

11. Form Prepared By

name/title Cynthia Martin Goldsmith

organization N.J. Office of Historic Preservation date April 28, 1980

street & number 109 West State Street telephone (609) 292-2023

city or town Trenton state New Jersey

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

X national state local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the Heritage Conservation and Recreation Service.

Deputy
State Historic Preservation Officer signature

title Deputy Commissioner, Dept. of Environmental Protection date 6-25-80

For HCRS use only

I hereby certify that this property is included in the National Register

Keeper of the National Register

date 12/12/80

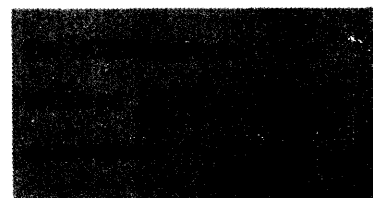
Attest:

date

Chief of Registration

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When first built, the central 80-by-50 foot main concourse provided access to interior corridors on either end which led to three small waiting rooms; the smallest were at either end of the station. Passenger access doors led to the field from the concourse and from each of the six waiting rooms. The main or ground floor also contained loading rooms where mail was assembled and made ready for air transport. This section was divided into office and various mail destination stations. In addition, the main floor contained space for commercial airline ticket counters, the State Aviation Commission, the airport physician, and a newspaper man who wrote daily columns about events at the port.

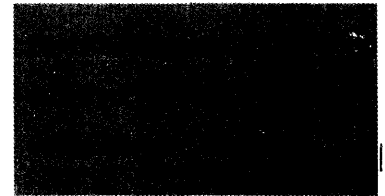
The second floor consisted of a central lobby flanked by miscellaneous offices in one wing, bedrooms in the other, the airport manager's office, a lounge, and an area with un-utilized space originally intended to serve as a restaurant which would have faced away from the landing area. This area was to one side of the second floor lobby which was decorated with a 10-panel 1,530 square foot abstract mural painted by Archile Gorky. To the other side of the lobby were two open air terraces which overlooked the air field. Atop the building at the rear was the 20-by-10 foot central Air-Traffic Control Tower, a semi-circular aluminum and glass room reached by a spiral stairway from the second floor.

The building was designed in the Art Deco style popular in the 1930's. The design incorporated large areas of glass and contained an interior of fanciful, yet restrained decoration which relied heavily on geometric motifs which were interspersed with references to the theme of flight. In the lobby, plaster wings decorated the capitals of columns which were square in section. The walls of the ground floor public areas were faced with highly polished marble. The stair rails were of aluminum. The theme of flight was repeated over the boarding area door with stylized aluminum birds which were applied to the decorative aluminum grillwork. The original ceiling fixtures were of fluted milkglass.

Today the interior of the structure has been partitioned by United States Postal Service for its airmail operation. The Art Deco lighting fixtures are gone, as are the grillwork and the aluminum seagulls. Although covered with sheetrock and/or paint, the marble wall-facing and the columns and capitals remain in place. The original ceilings and the terrazzo marble floors inlaid with aviation motifs also remain. The Gorky murals which were not destroyed during the U.S. Army's occupation of the airport during World War II have been cleaned and removed and now hang in the Newark Museum.

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The exterior changes include the addition of a loading dock to the east of the main entrance doors on the facade. The semi-circular canopy and tiered entrance steps have been removed from the air-field elevation and a long, covered loading dock extends across this elevation. From this point trucks transport airmail to the new terminals which opened in 1973. The control tower retains its original appearance.

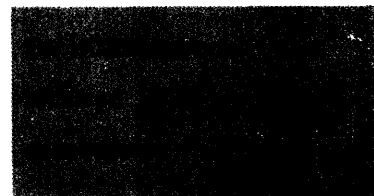
The BREWSTER HANGAR, built in 1938, is of steel-frame construction with hollow tile walls faced on the exterior with stucco. Overall dimensions are 1,106-by-210-by-64 feet, with a cubic contents of 7,816,000 feet, and a total area of approximately 194,000 square feet. There are four three-story, 62-by-28 foot pylons on the field side which were designed for use as office space for the individual airlines. At the rear of the hangar, which happens to be the street facade, are three separate one-story shop sections, the center one housing a central heating plant. The central shop measures 174-by-30 feet, the other two measure 136-by-27 feet.

The hangar is supported on concrete beams and footings resting on wooden piles, and piles support the concrete beams which carry the concrete-slab floor. The central sections of the plane storage area which were designed to support the wheels of transport planes were built on a heavier slab than were the outer areas. The five-ply built-up roof rests on 1-inch wood fiber insulation, which in turn rests on 2-inch gypsum plank supported on steel purlins which are carried by steel trusses. Six 62-ton, 160-foot-long main trusses support the 12-ton, 150-foot-long transverse trusses.

The hangar is divided into three entirely separate plane-storage areas by two sets of 12-inch-thick fire walls spaced five feet apart. The plane-storage areas have a width of 151 feet and total 1,039 feet in length, giving a total area of 157,000 square feet. Overhead clearance within the hangar is 35 feet. The six hangar openings, all facing the landing area, have a clearance of 160-by-32 feet. The hangar doors are electronically operated Morgan type overhead canopy Truscun doors which can be opened in 40 seconds. They can be manually operated in an emergency. Each opening is divided into a 120 foot and a 40 foot door section, either or both of which may be opened at the same time. A safety device extends along the length of the bottom of the doors, and consists of a strip of copper meshing within a flexible rubber shoe. The slightest pressure on this shoe is transmitted to the copper meshing, which closes an electric circuit and halts instantly the downward movement of the 40-ton door, preventing the jamming of the door or injury to a plane or person.

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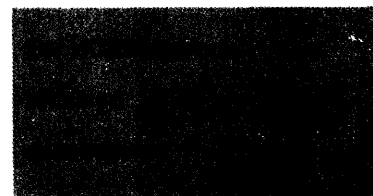
Each of the three hangar sections may be heated separately. The oil-fired central heating plant supplies steam to heat the hot air, delivered to the plane-storage areas by 30 overhead blower units. Heating is thermostatically controlled.

Today the hangar retains all of its original features in excellent condition. Although the structure is too small for most of the airplanes in use by the major airlines, the hangar remains in use as a service and storage area for the various airline companies.

The small Art Deco style MEDICAL BUILDING was built c. 1934-1938. The two-story structure is built of load-bearing brick, three bays wide with the end bays subdivided into two by the fenestration, and four bays deep with each bay also divided into two sub-bays. Two-story brick pilasters, square in section, mark the major divisions of bays.

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Significance

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When the city engineers began operations, the site was covered with earth and ash fill. The tremendous task involved leveling the mounds, filling the depressions, placing two creeks underground, installing a drainage system, and constructing roads and bridges. Yet, in less than seven months, the first unit, which consisted of about one-half of the total acreage, was opened. In August, 1928, a small, four-passenger Ryan monoplane from Washington, D.C. made the first landing on a completed section of 1,600-foot-long runway, the first hard-surfaced strip of any commercial airport in the nation. In addition, there was a 120-foot-square hangar capable of holding twenty-five aircraft.

In 1929, Newark was designated as the metropolitan airmail terminus. The first ADMINISTRATION BUILDING was also completed in this year in the Classical Revival style. By 1930 Newark Metropolitan Airport was the busiest in the world. The Weather Bureau began operations at Newark during this year. They occupied the second floor of the ADMINISTRATION BUILDING along with the Airways Bureau of the Department of Commerce. The first airport post office was also housed there. By the autumn of 1930, Transcontinental and Western Airways (now TWA) inaugurated the first all-passenger service to the West Coast. Colonial Airways (American), National Air Transport (United), and Pitcairn Aviation (Eastern) soon joined them. The airlines proceeded to construct their own hangars at Newark. The year 1932 brought the opening of the first airport restaurant. In August 1934, overnight plane service from Newark to Los Angeles was begun.

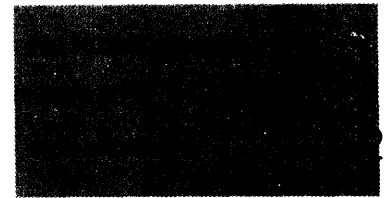
During the 1930's, the New Jersey State Military Air Unit, a division of the National Guard, maintained a squadron at Newark manned by 20 commissioned officers and 100 non-commissioned officers and men. In addition to military personnel, Newark Airport has been associated with many famous people including Wiley Post, Amelia Earhart and Howard Hughes who housed experimental planes in one of the hangars.

As new safety aids for flying were developed, Newark provided a testing ground. Night lighting, paved runways, air traffic control, radio transmittal from land to air, and instrument flying were all pioneered at Newark.

In late 1934, an engineer named Wall State received permission from the Army to build a permanent ADMINISTRATION BUILDING. Work on the building was continued by the Federal Civil Works Administration with a total cost of \$700,000. May 15, 1935 was the opening day of the beautiful Art Deco structure and Amelia Earhart dedicated the building. Meanwhile, during 1935, an artist whose studio was located in Greenwich Village, New York joined the WPA Federal Art Project. In August, 1935 the artist began the monumental ten-panel, 1,530-square-foot mural entitled

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"Evolution of Forms Under Aerodynamic Limitations" in colors of red, yellow, blue, brown, black, white and grey - all symbolic of the colors seen on the airfield. The mural was commissioned for the new ADMINISTRATION BUILDING. Unfortunately, the abstract style of the paintings aroused a storm of criticism, and during World War II when the Army Air Force took over the air-field and terminal, the murals were painted over and eight of the ten were eventually discarded. The two remaining panels were discovered in 1972 under fourteen layers of paint. In November, 1976 the paintings were removed and cleaned. Today they hang in the Newark Museum.

When Newark Metropolitan Airport opened, traffic was controlled by an official who stood near the runway and waved aircraft in and out with flags. The first control tower at the airport, a wooden structure built in 1929, contained a signal light. Night flying at the airport first depended upon a battery of floodlights mounted on a wooden platform and trained on the runway. Another early attempt was the installation of a line of lights down the center of the runway, flush with the cinder surface. White cobblestones, aligned along the edge of the black runway helped to define the outline of the landing strip. In 1932, wires which stretched at right angles to the runways emitted signals which gave a pilot a click in his radio headset as he reached a certain point in his landing approach. The first air traffic control center was established on December 1, 1935 with centers at Newark, Chicago and Cleveland. It was run by a corporation formed by four airlines (AA, EA, TWA, and UA) until 1936 when the federal government took over the responsibility.

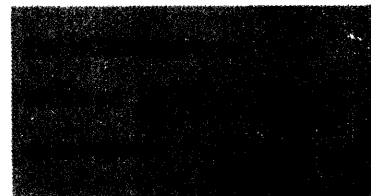
Construction on the BREWSTER HANGAR began in 1937 and continued through 1938. Its design was promoted as the most advanced of the time. The hangar boasted oil heat which was another Newark Airport first. Mammoth 40-ton doors were operated electronically. A dozen DC3's could be stored inside any one of the Hangar's six bays.

Until 1939 Newark was the world's busiest airport, but in that year Mayor LaGuardia of New York City completed construction of an airport at North Beach. Because of ongoing disorganization in the management of Newark Airport, three major airlines immediately moved their operations to LaGuardia's North Beach airport. Mayor Ellenstein closed his Newark Airport for reorganization.

In the spring of 1942 the War Department took Newark Metropolitan Airport over exclusively for military use. When World War II was over, the airport was returned to the city. While under military control, large new areas of reclaimed land were put to use to lengthen runways. A new drainage system was constructed and modern lighting was installed. New structures included a new control tower, a cargo building containing 40,000-square-feet of storage area, a double Butler hangar, and three supply houses.

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Continuation sheet

Significance

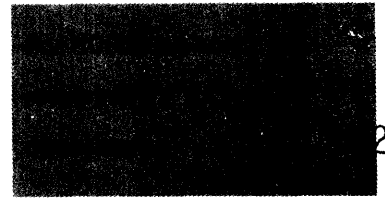
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In December, 1945, the City of Newark requested the Port Authority to consider taking over Newark Airport, along with Port Newark. The purpose was to allow the major expansion of the airport so that it might regain and retain the position of one of the nation's greatest air terminals. In 1948 the Port Authority of New York and New Jersey assumed administration of the Newark Airport and began their major expansion program which included major land acquisition, and development which continues to this day.

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Continuation sheet Bibliography

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Page 1

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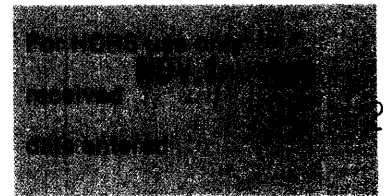
Port of New York Authority. P.A. Operation of Port Newark and Newark Airport. 1948.

Port of New York Authority. P.A. Operation of Port Newark and Newark Airport. 1953.

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NEWARK AIRPORT

10. Geographical Data - Verbal Boundary Description

The boundaries of the Historic Newark Metropolitan Airport Complex have been defined as the exterior perimeter of each of the three buildings included. (See Description) The measurements of the buildings are as follows:

Administration Building -

250'x60' main block with a 90'x38' wing flanking each end.

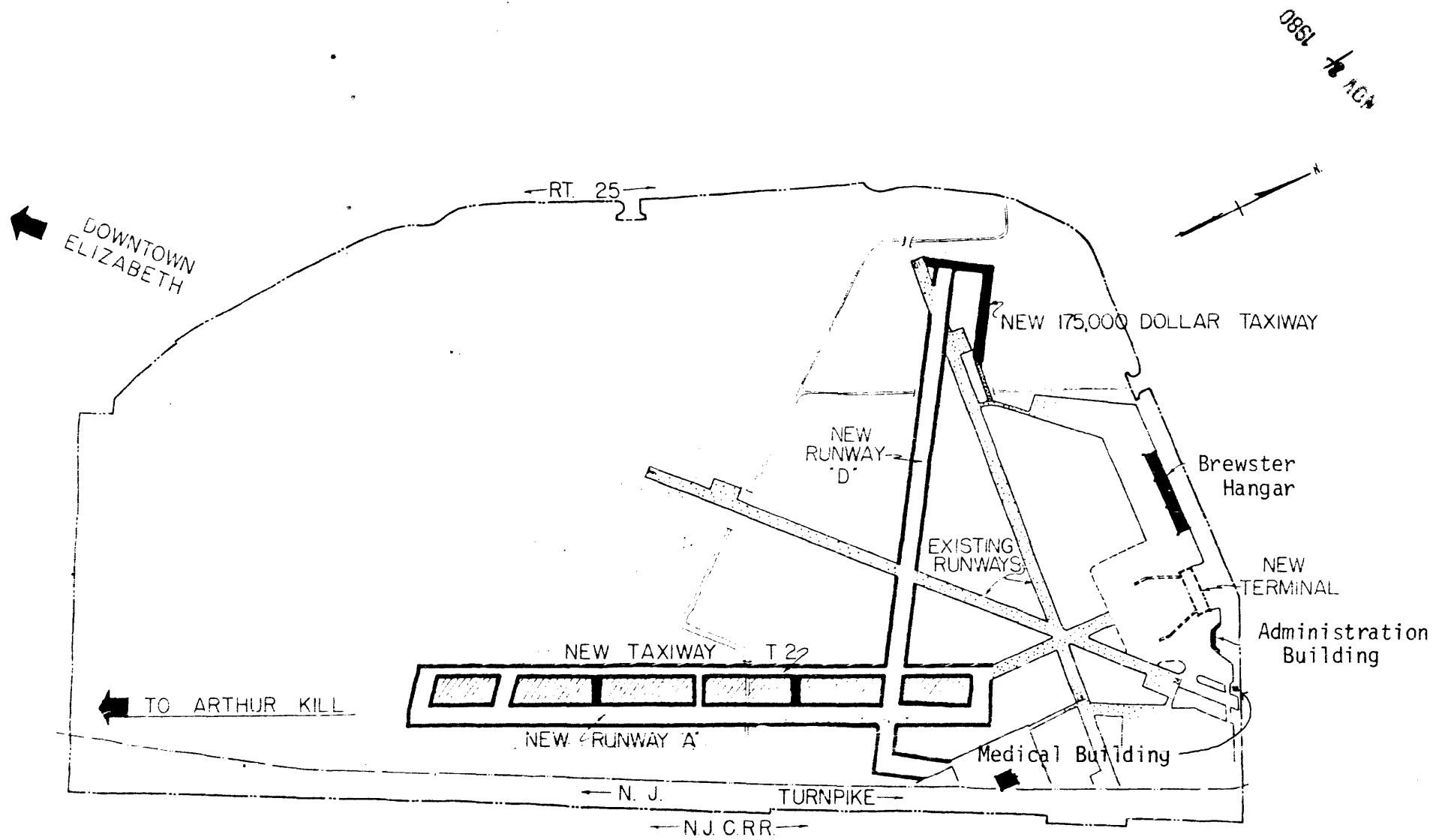
Brewster Hangar -

1,106'x210'

Medical Building

approximately 40'x80'

NOTE: Please refer to USGS map for locations of structures.

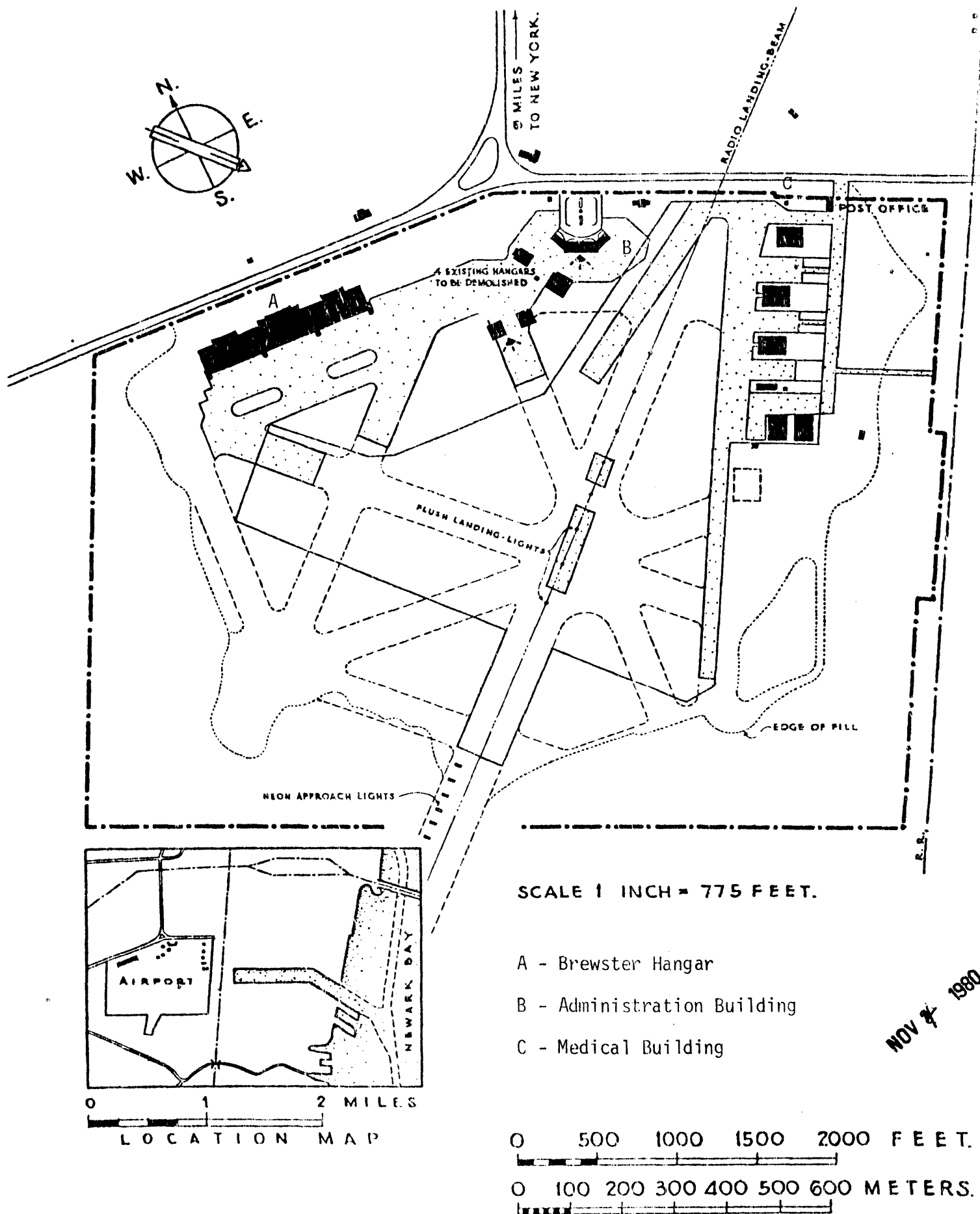


Newark Airport as it appeared in 1953

NEWARK

"NEWARK"

U.S.A



Newark Airport as it appeared in 1940



Brewster Hangar

Newark Metropolitan Airport *bldg*

Newark, Essex County, New Jersey

Date: May, 1980

Photographer; Craig Pillon

Negative Location: New Jersey

State Historic Preservation
Office

DEC 12 1980



Administration Building
Newark Metropolitan Airport *Bldg*
Newark, Essex County, New Jersey
Date: May, 1980
Photographer: Craig Pillon
Negative Location: New Jersey
State Historic Preservation
Office

DEC 12 1980

NOV 4 1980



Brewster Hangar, Interior
Newark Metropolitan Airport *Bldg*
Newark, Essex County, New Jersey
Date: May, 1980
Photographer: Craig Pillon
Negative Location: New Jersey
State Historic Preservation
Office

NOV 24 1980

DEC 12 1980



Brewster Hangar

Newark Metropolitan Airport

Newark, Essex County, New Jersey

Date: May, 1980 NOV 4 1980

Photographer: Craig Pillon

Negative location: New Jersey

State Historic Preservation
Office

DEC 12 1980



Administration Building

Newark Metropolitan Airport *Bldg*

Newark, Essex County, New Jersey

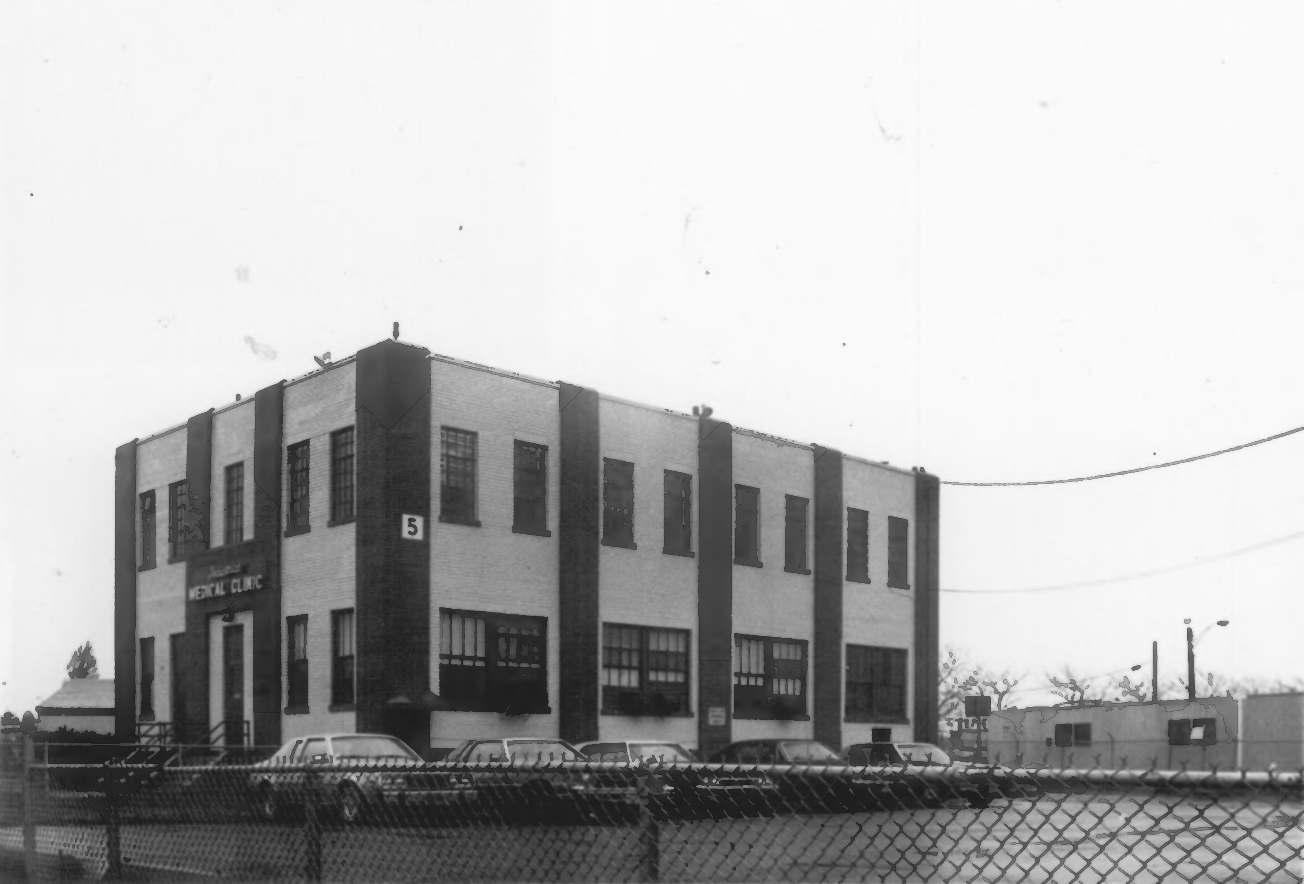
Date: May, 1980 NOV 24 1980

Photographer: Craig Pillon

Negative Location: New Jersey

State Historic Preservation
Office

DEC 12 1980



Medical Building

Newark Metropolitan Airport *Bldg.*

Newark, Essex County, New Jersey

Date: May, 1980

Photographer, Craig Pillon

Negative Location: New Jersey

State Historic Preservation
Office

DEC 12 1980

NOV 24 1980



Brewster Hangar NOV 4 1980
Newark Metropolitan Airport Bldg.
Newark, Essex County, New Jersey
Date: May, 1980
Photographer: Craig Pillon
Negative Location: New Jersey
State Historic Preservation
Office

DEC 12 1980



Brewster Hangar

Newark Metropolitan Airport ³*Bldg.*

Newark, Essex County, New Jersey

Date: May, 1980 **NOV 4 1980**

Negative Location: New Jersey

State Historic Preservation

Office

Photographer: Craig Pillon

DEC 12 1980